

II. Claim 62, drawn to a molding

A suggestion was made to amend the application to the preferred layout for patent applications (item 2, pages 3-4)

Claims 22, 25, 56 and 58 stand objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only. (item 3, page 4)

Claims 1-21, 23, 24, 27-55, 57, 60 and 61 stand rejected under 35 USC 112, *second paragraph*, as being indefinite for failing to particularly point out and distinctly claim the subject matter of the invention. (item 4, page 4)

Claims 1-4, 6, 8-10, 12-17, 20, 27-29, 40, 41, 46-51, 54, 60 and 61 stand rejected under 35 USC 102(b) as being anticipated by **Clark**, et al., U.S. Patent No. 4,113,224. (item 5, pages 5-6)

Claims 7, 11, 18, 19, 21, 23, 24, 30-39, 42-45, 52, 53, 55 and 57 stand rejected under 35 USC 103 as being obvious over **Clark**. (item 6, pages 6-8)

Claim 5 stands rejected under 35 USC 103 as being obvious over **Clark** in view of European Patent Application 484,015 (**EP '015**). (item 7, pages 8-9)

REMARKS

Applicants present claims 1-5, 8-40, 42-61 and 63-81 for consideration. Claim 62 has been canceled in response to the restriction requirement. Claims 6, 7 and 41 have been canceled and replaced by new claims. New claims 63-81 have been added to clarify the claimed invention and to secure further embodiments of the invention. Claims 1, 3, 13, 22, 25, 40, 43, 44, 47, 49, 56 and 58 have been amended for clarity. The application now contains independent process claims 1 and 79 and independent device claim 40.

RESTRICTION REQUIREMENT*35 USC 121*

Restriction (item 1, pages 2-3) to one of the following inventions is required under 35 *USC 121*:

- I. Claims 1-61, drawn to a method and device for the manufacture of moldings
- II. Claim 62, drawn to a molding

During a telephone conversation with the Examiner, Group I (claims 1-61) was provisionally elected with traverse. Applicants hereby affirm election of Group I, while maintaining traversal of the restriction requirement. Claim 62 has been canceled, without prejudice to further prosecution, in response to the restriction requirement. The restriction requirement with respect to Groups I and II is respectfully traversed on the following grounds.

The Examiner (page 2) states that the reason for the restriction of Groups I and II is that the molding (Group II, claim 62) as claimed can be made by a materially different process such as those not using a source of energy to cure the material. However, if the process of claim 1 is not used, the molding does not fall within claim 62. Claim 62 recites a molding which is *manufactured in accordance with the process according to claim 1*. Thus, the molding cannot be made without the process of claim 1. Accordingly, reconsideration of the restriction requirement is respectfully requested.

APPLICATION LAYOUT

A suggestion was made to amend the application to the preferred layout for patent applications (item 2, pages 3-4). Various amendments to the specification have been made.

The application has been amended, after the title on page 1, to recite claims to foreign priority under 35 *USC 119*. The following headings have been added:

- “Background”, “Field”, and “Related Art” to page 1;
- “Summary of the Invention” to page 3;
- “Brief Description of the Drawings” to page 4;
- “Description of the Preferred Embodiments” to page 5;
- “Examples” to page 39; and
- “Claims” to page 43.

While the preferred layout is not a requirement, it is acknowledged a clear format may increase the reader's understanding of the invention. Suggestions regarding format clarity are appreciated.

IMPROPER DEPENDENT CLAIMS

37 CFR 1.75(c)

Claims 22, 25, 56 and 58 stand objected to under *37 CFR 1.75(c)* as being in improper form because a multiple dependent claim should refer to other claims in the alternative only. (item 3, page 4). Claims 22, 25, 56 and 58 have been amended to remove the multiple dependencies. Reconsideration of the objection is respectfully requested.

INDEFINITENESS

35 USC 112, second paragraph

Claims 1-21, 23, 24, 27-55, 57, 60 and 61 stand rejected under *35 USC 112, second paragraph*, as being indefinite for failing to particularly point out and distinctly claim the subject matter of the invention (item 4, page 4).

First, language such as “especially”, “specifically”, and “particularly” is deemed indefinite. Claims 6, 7, 41 have been deleted. New claims 63-78 have been added to improve clarity and definiteness. The language “especially”, “specifically”, and “particularly” and related recitations have been removed from the claims, and appropriate dependent claims have been added. Accordingly, consideration of the new claims and amended claims is respectfully requested.

The Examiner also noted (pages 4-5) that the “starting material should be positively identified as a polymeric or plastic resin material in claims 1 and 40 for clarity”. The basis for this rejection is not understood. The crosslinkable material may be a polymeric material, but is more likely a monomeric or macromeric material. However, there is no reason to restrict the material to anything more than a “crosslinkable material”. Reconsideration of this basis of indefiniteness is respectfully requested.

The Examiner further questioned whether the molds themselves are intended to be immersed in the starting materials in claims 13, 47 and 49. Claims 13, 47 and 49 have been amended to clarify that the mold is at least partially immersed in the crosslinkable material.

Reconsideration of the 35 USC 112, *second paragraph* rejections in view of the above amendments and discussion is respectfully requested.

NOVELTY
35 USC 102(b)

Claims 1-4, 6, 8-10, 12-17, 20, 27-29, 40, 41, 46-51, 54, 60 and 61 stand rejected under 35 USC 102(b) as being anticipated by **Clark** (item 5, pages 5-6).

Clark is cited by the Examiner for the teaching of using heat or other forms of radiation such as UV light in connection with forming a contact lens (col. 6, line 51). However, **Clark** teaches the polymerization of monomers (col. 6, line 44), not the crosslinking of crosslinkable material to form a lens.

Clark is also cited for the teaching of a reservoir which has monomeric starting material which floods the mold cavity. More importantly, the Examiner indicates that the diaphragm 141 in FIG. 3 of **Clark** is equivalent to the present mask (page 6). However, reference to col. 7, lines 5-25 clarifies the function of diaphragm 141:

"It should be emphasized that polymerization of the lens material should proceed from the center of the mold outwards in order to avoid ... blocking off the reservoir.."

Therefore, **Clark** teaches a method of polymerizing the center of a molding cavity first, then polymerizing the edges. **Clark** does not teach or suggest a method of reducing defects, with the defect reduction being effected by applying restricted energy to a molding cavity to crosslink a crosslinkable material.

The **Clark** diaphragm does not restrict the radiation so that the spatial distribution of impinging energy determines the edge contour of the molding. Thus, the **Clark** process does not produce lenses which are free from burrs and flashes, while the presently claimed process advantageously accomplishes this remarkable result.

In fact, **Clark** teaches that flash may be removed in accordance with certain known processes (col. 8, lines 47-52). Clearly, the **Clark** process produces lenses which contain edge flash. This requires a subsequent and inefficient step of edge contouring, or alternatively, discarding lenses with edge flash.

Further clarification of the **Clark** teaching is offered in the following excerpt, at col. 7, lines 18-25:

“The diameter of opening 143 should be smaller than the diameter of the lens being cast in order to insure that the lens material adjacent to the edge of the mold is shielded from the radiation. In operation, once the lens material in the center of the mold cavity has been polymerized, diaphragm 141 is removed to permit polymerization of the lens material adjacent to the edge of the mold.”

Thus, **Clark** teaches removal of the diaphragm before completion of polymerization, in order to ensure flow from the reservoir. In contrast, the presently claimed process requires restriction of the energy during crosslinking, in order to define a burr and flash-free edge.

It is respectfully submitted that the present claims do not read on the **Clark** process and **Clark** cannot be construed so as to anticipate the present claims. Reconsideration and withdrawal of the rejections under 35 USC 102 is respectfully requested.

OBVIOUSNESS

35 USC 103

Claims 7, 11, 18, 19, 21, 23, 24, 30-39, 42-45, 52, 53, 55 and 57 stand rejected under 35 USC 103 as being obvious over **Clark** (item 6, pages 6-8). Claim 5 stands rejected under 35 USC 103 as being obvious over **Clark** in view of EP ‘015 (item 7, pages 8-9).

The rejections under 35 USC 103 are traversed on the above-stated grounds. EP ‘015 does not cure the cited deficiencies of **Clark**; it is merely submitted with reference to claim 5. Accordingly, a thorough discussion of EP ‘015 is not warranted at this time.

Reconsideration and withdrawal of the rejections under *35 USC 103* is respectfully requested.

FEES

The Office action dated 10/4/95 had a three month statutory period for response, expiring on 1/4/96. While no fees are believed due, the Commissioner is hereby authorized to charge fees which may be required under *37 CFR 1.16* and *1.17*, or credit any overpayment, to Deposit Account No. 07-0590.

CONCLUSION

In view of the above amendments and discussion, all the claims are believed to be in a condition for allowance. Reconsideration and allowance of the solicited claims is respectfully requested.

Respectfully submitted,

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